

# Service Manual

 **PIONEER®**



**ORDER NO.  
ART-744-0**

**AUDIO DIGITAL TIMER**

# DT-510

MODEL DT-510 COMES IN SIX VERSIONS DISTINGUISHED AS FOLLOWS:

Type	Voltage	Remarks
KU	120V only	U.S.A. model
KC	120V only	Canada model
S	110V, 120V, 220V and 240V (Switchable)	General export model
S/G	110V, 120V, 220V and 240V (Switchable)	U.S. Military model
YB	240V only	United Kingdom model
NE	220V only	Europe model

- This service manual is applicable to the DT-510/S,S/G. When repairing the DT-510/KU, please see page 11, and for the other types, please refer to the additional service manuals.

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# 1. SPECIFICATIONS

Time display .....	Digital display with fluorescent display tube
Timer type .....	24-hour type (AM/PM, 12-hour display)
Timer setting .....	Only one ON/OFF time setting in minimum units of minutes within a 24-hour period
Sleep timer .....	Setting in minimum units of minutes up to 1 hour 59 minutes
Time accuracy .....	Synchronized with line frequency
Timer accuracy .....	Within $\pm 0.1$ sec. of time displayed
Sleep timer accuracy .....	Within 59 sec. of set time
<b>Power section, others</b>	
Power requirements .....	AC 110V/120V/220V/240V (switchable) 50Hz/60Hz (switchable)
AC outlets .....	Total of 2 outlets, 1,200 W max. capacity power (500 W for audio equipment)
Power consumption .....	6 W

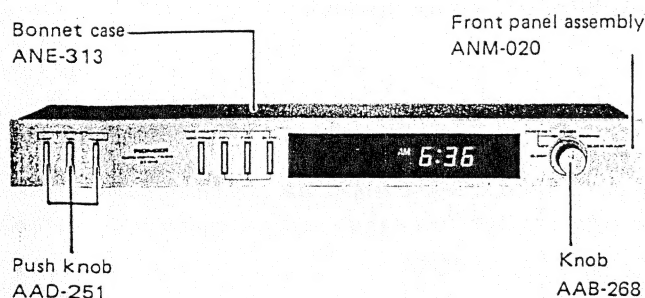
# 2. PARTS LOCATIONS

\* These parts locations are applicable to the DT-510/KU.

## NOTES:

- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your Parts Stock Control, the fast moving items are indicated with the marks **★★** and **★**.  
**★★ GENERALLY MOVES FASTER THAN ★**  
 This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.

Front Panel



## Other functions

- AC OUTLET "on" display (red LED lights)
- Timer operation display (green LED lights)
- Power failure display (time display winks)

Dimensions ..... 420 (W) x 50 (H) x 144 (D) mm  
 16-9/16 (W) x 2 (H) x 5-11/16 (D) in  
 Weight ..... 1.7 kg (3 lb 12 oz)

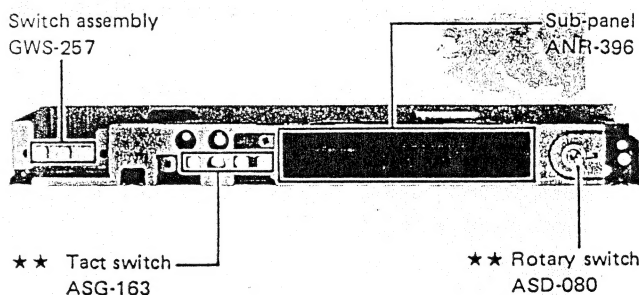
## Accessories

Operating Instructions .....1

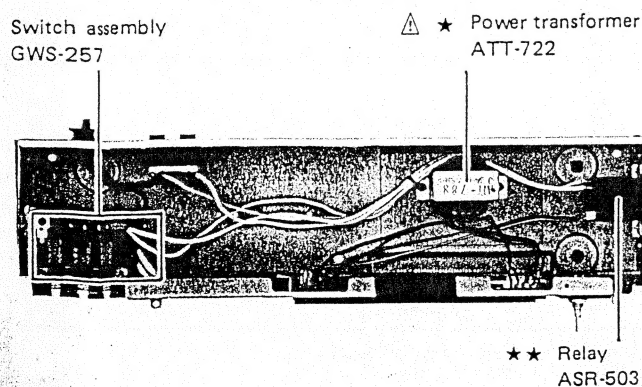
## NOTE:

Specifications and design are subject to possible modification without notice due to improvements.

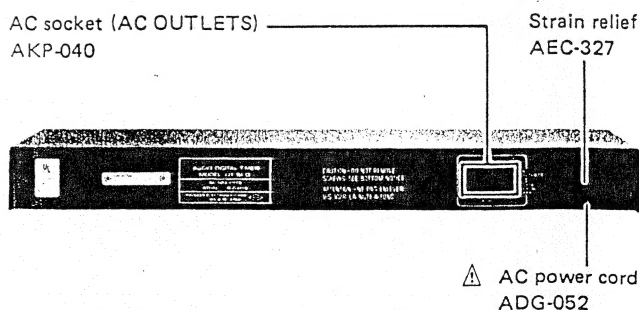
Front View with Panel Removed



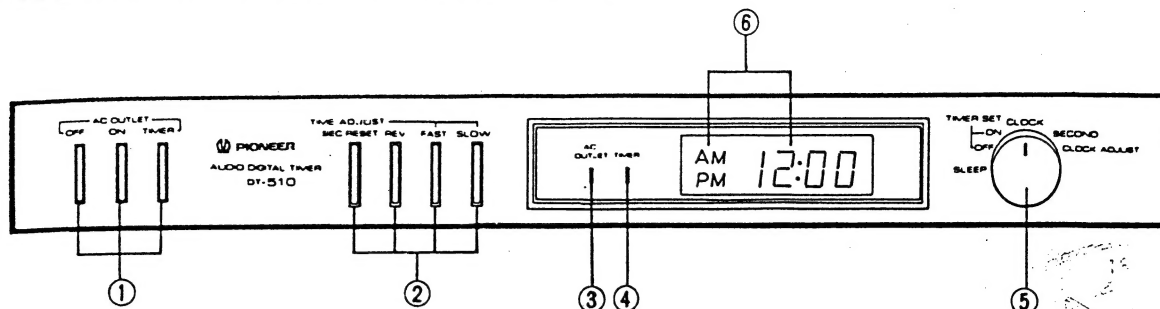
Top View with Bonnet Removed



Rear Panel



### 3. FRONT PANEL FACILITIES



#### ① AC OUTLET SELECTORS

These switch on and off the power flowing to the rear panel AC outlets.

- OFF:** Used to switch off the power of the connected audio components regardless of the timer operation (set times).
- ON:** Used to switch on the power of the connected audio components regardless of the timer operation (set times).
- TIMER:** Used to switch ON and OFF the power of the connected audio components with the timer operation.

#### ② TIME ADJUST SWITCHES

These are used to adjust the time/displayed times in line with the setting of the mode selector.

**SEC RESET:** When this switch is depressed with the mode selector in the **SECOND** position, the second display of the present time is reset to **00** and when released the seconds are counted up from **00** → **01** → **02** → etc., and the rightmost minute digit and seconds are displayed.

**REV:** When the **FAST** or **SLOW** switch is depressed while this switch is in the depressed position, the displayed time is reversed rapidly or slowly. (This function does not work when the sleep timer function is set.)

**FAST:** When this switch is depressed, the displayed time is forwarded rapidly.

**SLOW:** When this switch is depressed, the displayed time is forwarded slowly.

#### ③ AC OUTLET INDICATOR (red)

This lights when power is being supplied to the AC OUTLETS on the rear panel.

#### ④ TIMER INDICATOR (green)

This lights when the AC OUTLET-TIMER selector is depressed.

#### ⑤ MODE SELECTOR

This is used to select the timer's function.

- SLEEP:** Used to set the operating time (1 minute to 1 hour 59 minutes) until the power of the audio components operating is to be set OFF.

**TIMER SET-OFF:** Used to set the time at which the power to the connected audio components is set OFF.

**TIMER SET-ON:** Used to set the time at which the power to the connected audio component is set ON.

**CLOCK:** Used to display the present time (hours & minutes).

**SECOND:** Used to adjust the seconds of the present time and check the seconds of the present time.

**CLOCK ADJUST:** Used to adjust the clock to the present time.

#### ⑥ TIME DISPLAY

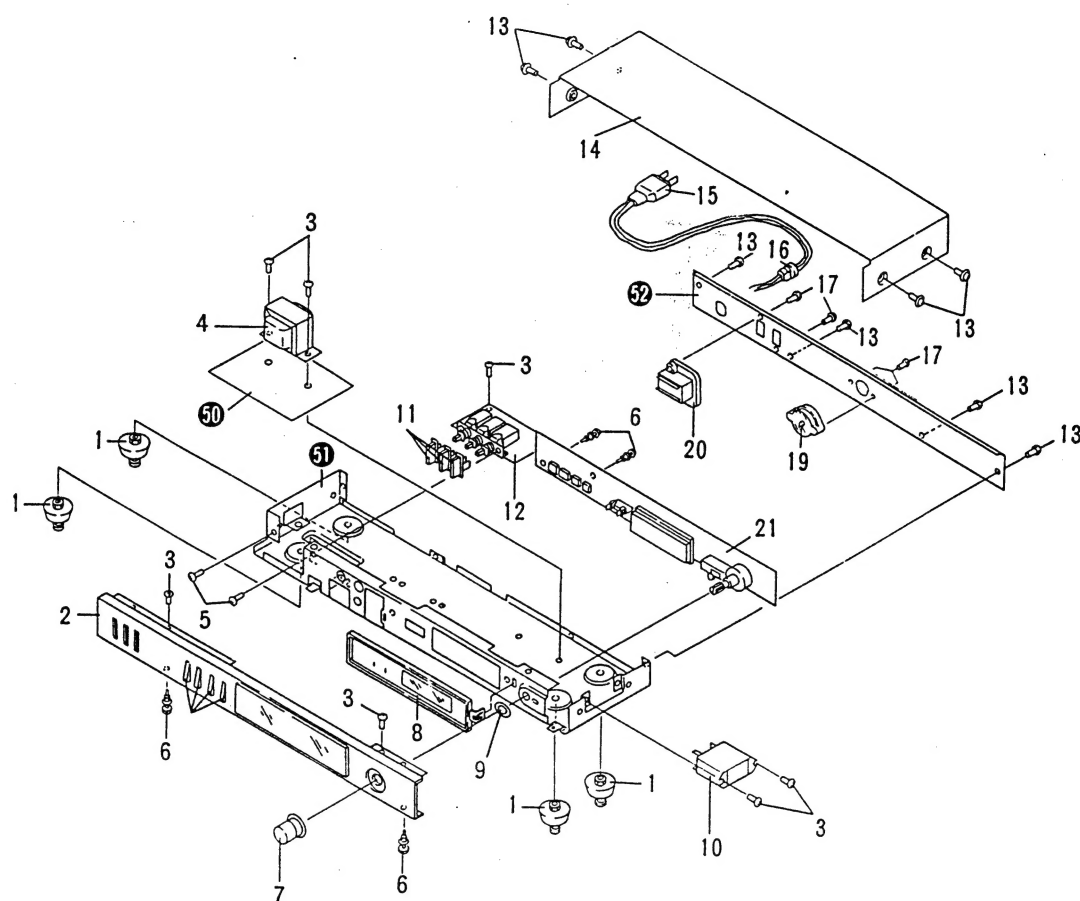
The time is displayed as it relates to the mode selector or TIME ADJUST switch settings in the following table.

Mode selector	TIME ADJUST switch	Display	Example of display
SLEEP	FAST	Time until sleep operation is due to go OFF.	<b>1:30</b> 1 hr 30 min.
	SLOW		
TIMER SET-OFF	FAST SLOW REV	Display of OFF time set by timer.	<b>AM 8:00</b>
TIMER SET-ON	FAST SLOW REV	Display of ON time set by timer	<b>AM 7:30</b>
CLOCK	—	Display of present time	<b>PM 5:38</b>
SECOND	—	Display of seconds and rightmost digit of present time minute	<b>8:25</b> 8 min. 25 sec.
	SEC RESET	Display for adjusting seconds correctly of present time	<b>5:00</b> 5 min. 00 sec.
CLOCK ADJUST	FAST SLOW REV	Display for adjusting hours and minutes of present time	<b>PM 12:05</b>

#### NOTE:

When the unit's power plug is connected to a household AC outlet, the "AM 12:00" or "0:00" time display will wink. It also winks when there has been a power failure while the unit was working and the power has been restored.

## 4. EXPLODED VIEW



### NOTES:

- Parts without part number cannot be supplied.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

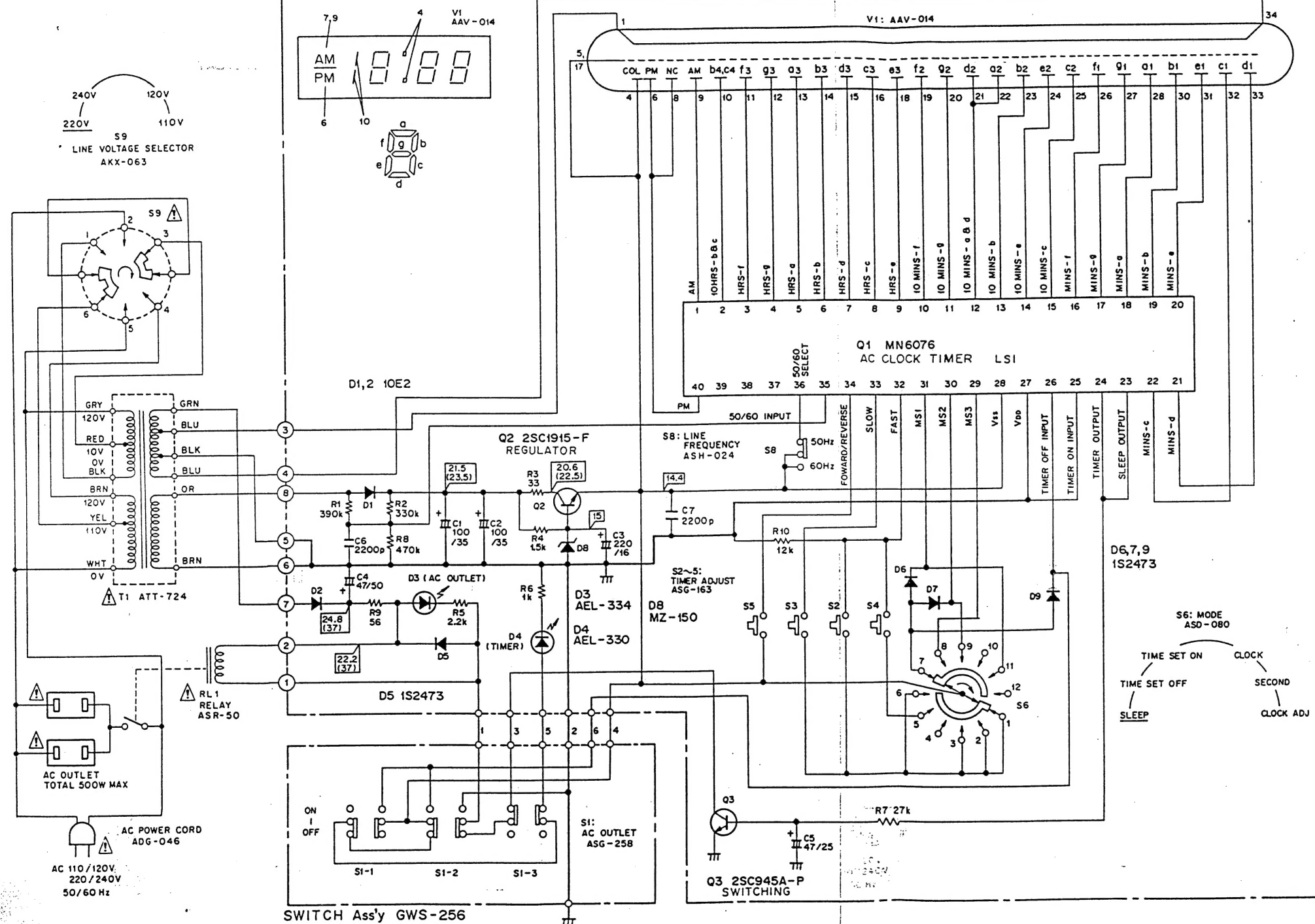
### Parts List

Mark	No.	Part No.	Description	Mark	No.	Part No.	Description
	1.	AEC-609	Foot assembly		16.	AEC-327	Strain relief
	2.	ANM-020	Front panel assembly		17.	MTZ30P100FZK	Screw
	3.	VBZ30P060FMC	Screw		18.	.....	
$\Delta$ *	4.	ATT-724	Power transformer	$\Delta$ ★★	19.	AKX-063	Line voltage selector
	5.	PMZ30P060FZB	Screw		20.	AKP-040	AC socket (AC OUTLETS)
	6.	AEC-510	Nylon rivet		21.	GWX-526	Timer assembly
	7.	AAB-268	Knob		50.		Plate
	8.	ANR-396	Sub-panel		51.		Chassis
	9.	ABN-024	Nut		52.		Rear panel
$\Delta$ ★★	10.	ASR-502	Relay				
	11.	AAD-251	Push knob				
	12.	GWS-256	Switch assembly				
	13.	BBT30P080FZK	Screw				
	14.	ANE-313	Bonnet case				
$\Delta$	15.	ADG-046	AC power cord				



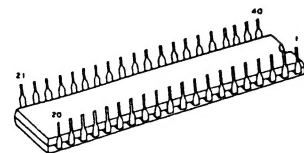
# 5. SCHEMATIC DIAGRAMS

TIMER Ass'y GWX-526

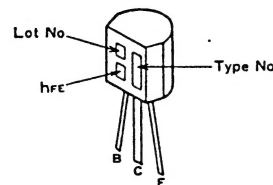


SWITCH Ass'y GWS-256

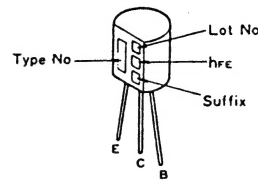
Appearance of Transistors and ICs  
MN6076



2SC1915



2SC945A



## NOTE:

The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.

### 1. RESISTORS:

Indicated in  $\Omega$ ,  $\frac{1}{2}W$ ,  $\pm 5\%$  tolerance unless otherwise noted k : k $\Omega$ , M : M $\Omega$ , (F) :  $\pm 1\%$ , (G) :  $\pm 2\%$ , (K) :  $\pm 10\%$  tolerance

### 2. CAPACITORS:

Indicated in capacity ( $\mu F$ )/voltage (V) unless otherwise noted p : pF  
Indication without voltage is 50V except electrolytic capacitor.

### 3. VOLTAGE

$\square$  : DC voltage (V) at TIMER, RELAY ON  
Value in ( ) is DC voltage at AC OUTLET OFF

### 4. OTHERS:

The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

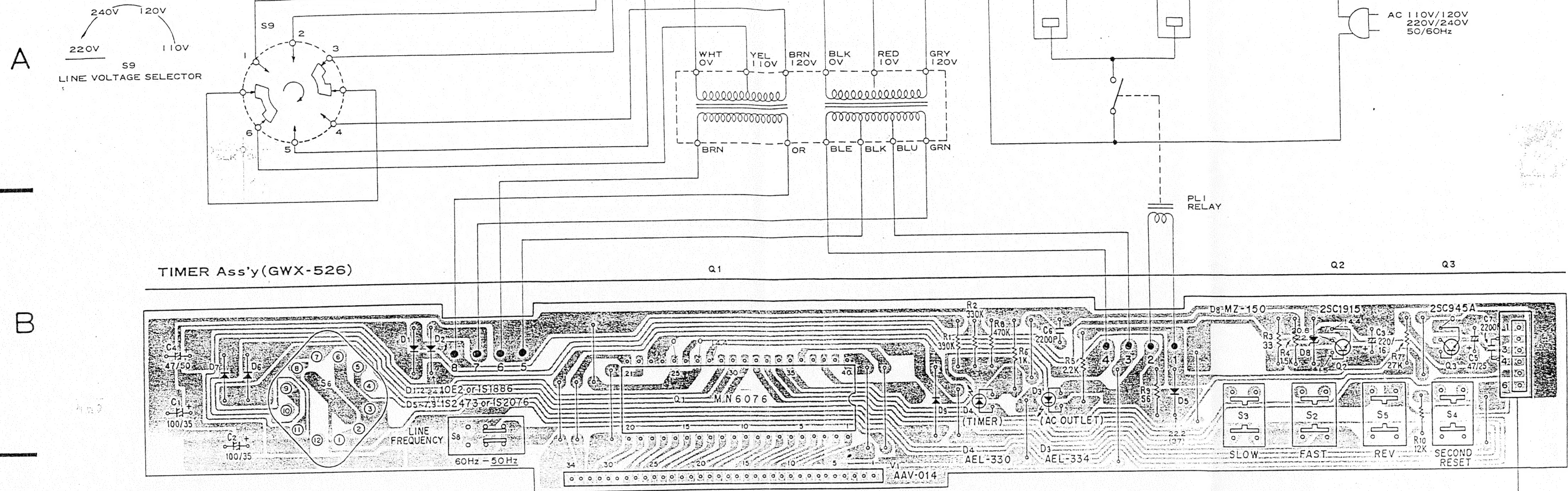
### SWITCHES:

- S1-1 : AC OUTLET (OFF) ON - OFF
- S1-2 : AC OUTLET (ON) ON - OFF
- S1-3 : AC OUTLET (TIMER) ON - OFF
- S2 : TIME ADJUST (FAST) ON - OFF
- S3 : TIME ADJUST (SLOW) ON - OFF
- S4 : TIME ADJUST (SEC RESET) ON - OFF
- S5 : TIME ADJUST (REV) ON - OFF
- S6 : MODE  
SLEEP - TIMER SET OFF - TIMER SET ON -  
CLOCK - SECOND - CLOCK ADJUST
- S8 : LINE FREQUENCY 50Hz - 60Hz
- S9 : LINE VOLTAGE SELECTOR  
110V - 120V - 220V - 240V

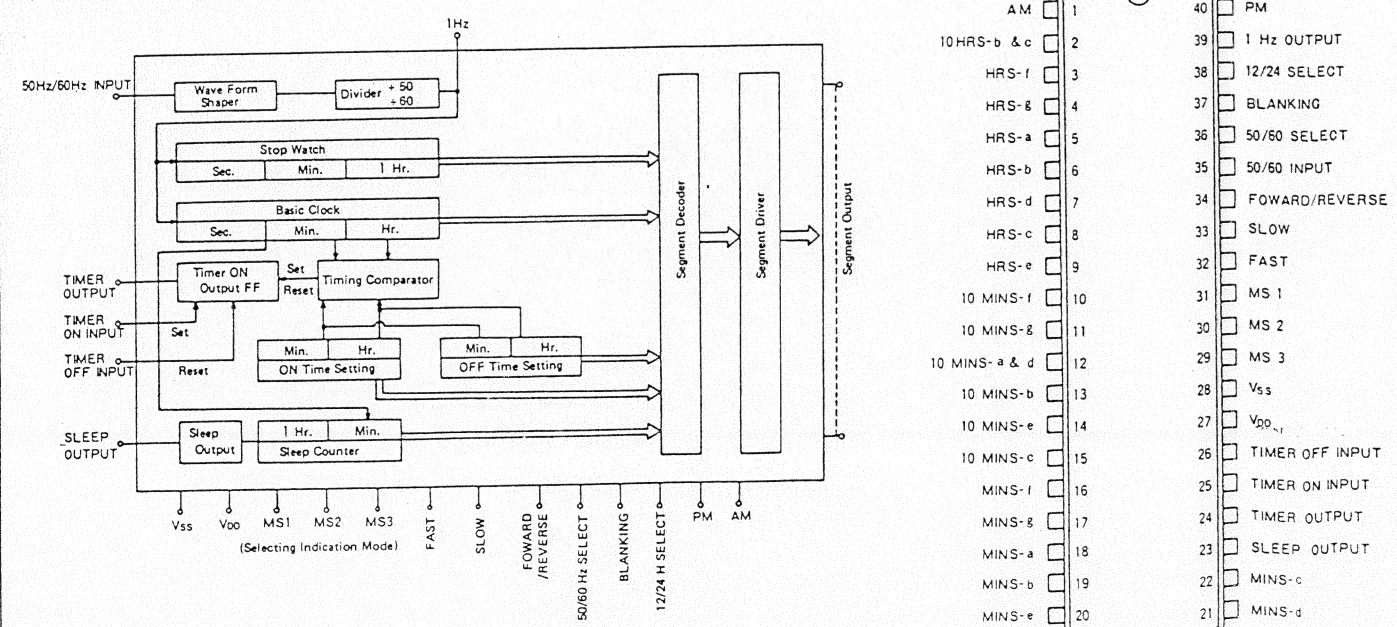
The underlined indicates the switch position.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

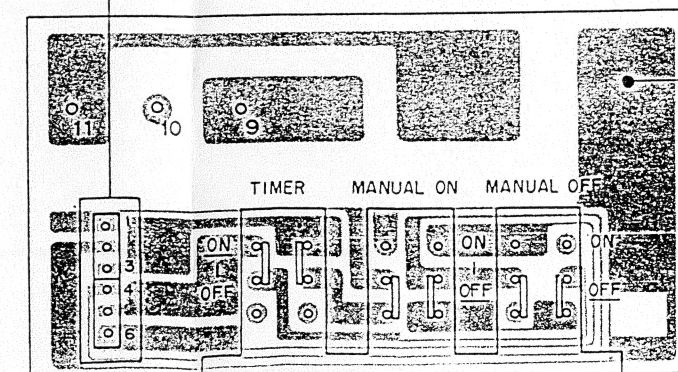
## 6. P.C.BOARD CONNECTION DIAGRAM



## MN6076 BLOCK DIAGRAM



## SWITCH Ass'y (GWS-256)



## 7. PARTS LIST

### NOTES:

- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560Ω    56 × 10<sup>1</sup>    561 ..... RD4PS 561 J  
 57kΩ    47 × 10<sup>3</sup>    473 ..... RD4PS 473 J  
 0.5Ω    0R5 ..... RN2H 055 K  
 1Ω    010 ..... RS1P 010 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ    562 × 10<sup>1</sup>    5621 .... RN4SR 5621 F

- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

- For your Parts Stock Control, the fast moving items are indicated with the marks \*\* and \*.

\*\* GENERALLY MOVES FASTER THAN \*

This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.

### 7.1 TIMER ASSEMBLY (GWX-526)

#### SWITCHES

Mark	Part No.	Symbol & Description	Mark	Part No.	Symbol & Description
**	ASG-163	S2-S5    Tact switch	*	10E2	D1, D2
**	ASD-080	S6    Rotary switch		(1S1886)	
**	ASH-024	S8    Slide switch	*	AEL-334	D3
			*	AEL-330	D4
			*	1S2473	D5-D7, D9
				(1S2076)	
			*	MZ-150	D8
				(WZ-150)	

#### CAPACITORS

Mark	Part No.	Symbol & Description
	CEA 101M 35L	C1, C2
	CEA 221M 16L	C3
	CEA 470M 50L	C4
	CEA 470M 25L	C5
	CKDYB 222K 50	C6, C7

#### OTHER

Mark	Part No.	Symbol & Description
*	AAV-014	V1    Fluorescent indicator tube

#### RESISTORS

NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

### 7.2 SWITCH ASSEMBLY (GWS-256)

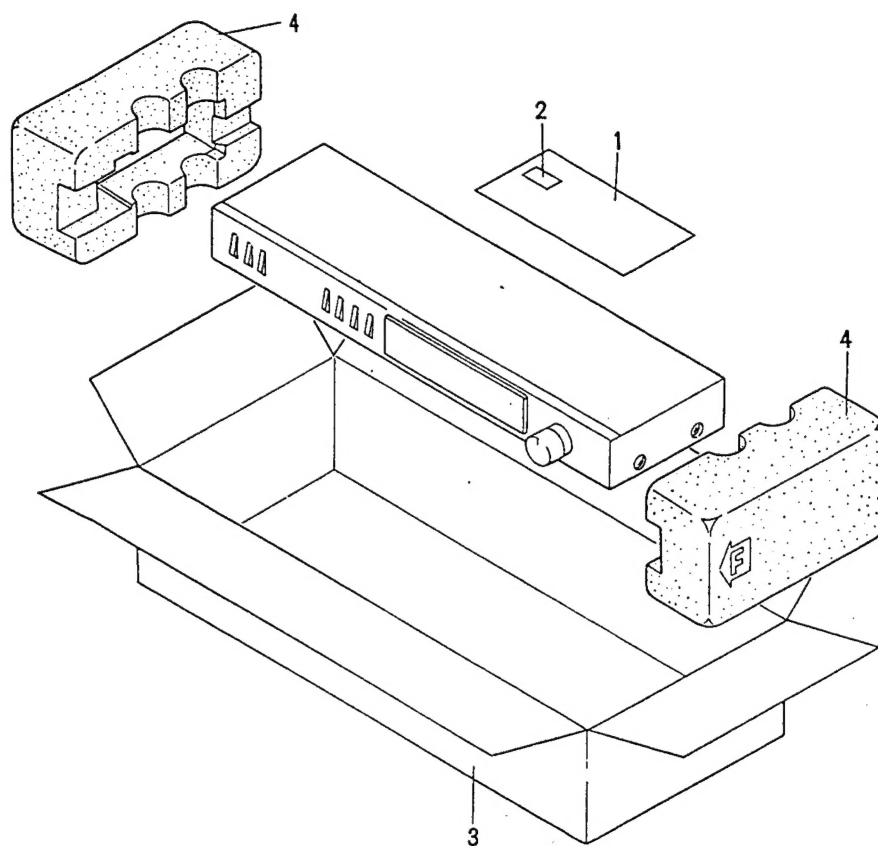
Mark	Part No.	Symbol & Description	Mark	Part No.	Symbol & Description	Part N
	RD4PM 000 J	R1-R10	**	ASG-258	S1    Push switch	ROW

#### SEMICONDUCTORS

Mark	Part No.	Symbol & Description
**	MN6076	Q1
**	2SC1915	Q2
**	2SC945A	Q3



# PACKING



## Parts list

Mark	No.	Part No.	Description
	1.	ARB-409	Operating instructions
	2.	AEA-049	Rubber cushion assembly
	3.	AHD-909	Packing case
	4.	AHA-256	Side pad
	5.	AHX-018	Master box

ADDITIONAL

PIONEER®

# Service Manual



AUDIO DIGITAL TIMER

## DT-510 KU

### 1. CONTRAST OF MISCELLANEOUS PARTS

**NOTES:**

- Parts without part number cannot be supplied.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your Parts Stock Control, the fast moving items are indicated with the marks **★★** and **★**.  
**★★ GENERALLY MOVES FASTER THAN ★**  
 This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.

Mark	Symbol & Description	Part No.			Remarks
		S type	S/G type	KU type	
	Timer assembly	GWX-526	GWX-526	GWX-527	
	Switch assembly	GWS-256	GWS-256	GWS-257	
$\Delta$ ★★ RL1	Relay	ASR-502	ASR-502	ASR-503	
$\Delta$ ★★ S9	Line voltage selector	AKX-063	AKX-063	.....	
$\Delta$ ★ T1	Power transformer	<u>ATT-724</u>	ATT-724	ATT-722	
$\Delta$	AC power cord	ADG-046	ADG-046	ADG-052	
	Operating instructions	ARB-409	ARB-409	ARB-410	

### 2. SPECIFICATIONS

Time display ..... Digital display with fluorescent display tube

Timer type ..... 24-hour type (AM/PM, 12-hour display)

Timer setting ..... Only one ON/OFF time setting in minimum units of minutes within a 24-hour period

Sleep timer ..... Setting in minimum units of minutes up to 1 hour 59 minutes

Time accuracy ..... Synchronized with line frequency

Timer accuracy ..... Within  $\pm 0.1$  sec. of time displayed

Sleep timer accuracy ..... Within 59 sec. of set time

#### Power section, others

Power requirements ..... AC 120 V 60 Hz

AC outlets ..... Total of 2 outlets, 1,200 W max. capacity power (500 W for audio equipment)

Power consumption ..... 6 W



## Other functions

- AC OUTLET "on" display (red LED lights)
- Timer operation display (green LED lights)
- Power failure display (time display winks)

Dimensions ..... 420 (W) x 50 (H) x 144 (D) mm

16-9/16 (W) x 2 (H) x 5-11/16 (D) in

Weight ..... 1.7 kg (3 lb 12 oz)

## Accessories

Operating Instructions ..... 1

## NOTE:

Specifications and design are subject to possible modification without notice due to improvements.

## 3. PARTS LIST

## NOTES:

- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560Ω 56 × 10<sup>1</sup> 561..... RD4PS 561 J

57kΩ 47 × 10<sup>3</sup> 473..... RD4PS 473 J

0.5Ω 0R5 ..... RN2H 0R5 K

1Ω 010 ..... RS1P 010 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ 562 × 10<sup>1</sup> 5621 .... RN4SR 5621 F

- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

- For your Parts Stock Control, the fast moving items are indicated with the marks \*\* and \*.

\*\* GENERALLY MOVES FASTER THAN \*

This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.

## 3.1 TIMER ASSEMBLY (GWX-527)

## SWITCHES

Mark	Part No.	Symbol & Description
**	ASG-163	S2-S5 Tact switch
**	ASD-080	S6 Roatry switch

## CAPACITORS

Mark	Part No.	Symbol & Description
	CEA 101M 35L	C1, C2
	CEA 221M 16L	C3
	CKDYB 222K 50	C6, C7
	CEA 470M 25L	C5
	CEA 470M 50L	C4

## RESISTORS

NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

Mark	Part No.	Symbol & Description
	FD4PM □□□ J	R1-R10

## SEMICONDUCTORS

Mark	Part No.	Symbol & Description
**	MN6076	Q1
**	2SC1915	Q2
**	2SC945A	Q3
*	10E2 (1S1886)	D1, D2
*	AEL-334	D3
*	AEL-330	D4
*	1S2473 (1S2076)	D5-D7, D9
*	MZ-150 (WZ-150)	D8

## OTHER

Mark	Part No.	Symbol & Description
*	AAV-014	V1 Fluorescent indicator tube

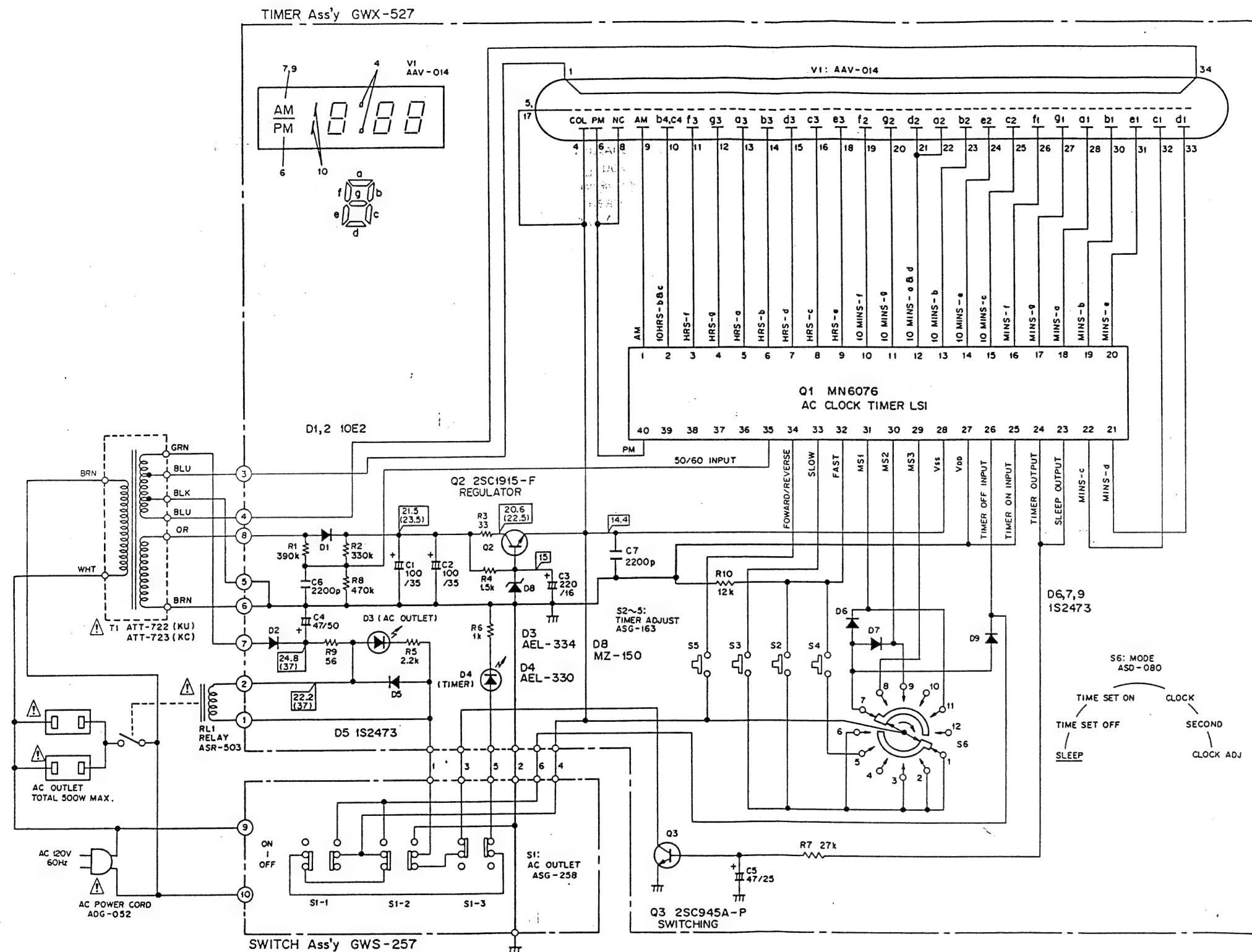
## 3.2 SWITCH ASSEMBLY (GWS-257)

Mark	Part No.	Symbol & Description
**	ASG-258	S1 Push switch

# 4. SCHEMATIC DIAGRAM

DT-510

NOTE:  
The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.



1. RESISTORS:  
Indicated in  $\Omega$ ,  $\frac{1}{2}W$ ,  $\pm 5\%$  tolerance unless otherwise noted k : k $\Omega$ , M : M $\Omega$ , (F) :  $\pm 1\%$ , (G) :  $\pm 2\%$ , (K) :  $\pm 10\%$  tolerance

2. CAPACITORS:  
Indicated in capacity ( $\mu F$ )/voltage (V) unless otherwise noted p : pF  
Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE:  
DC voltage (V) at TIMER, RELAY ON.  
Value in ( ) is DC voltage at AC OUTLET OFF.

4. OTHERS:  
The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

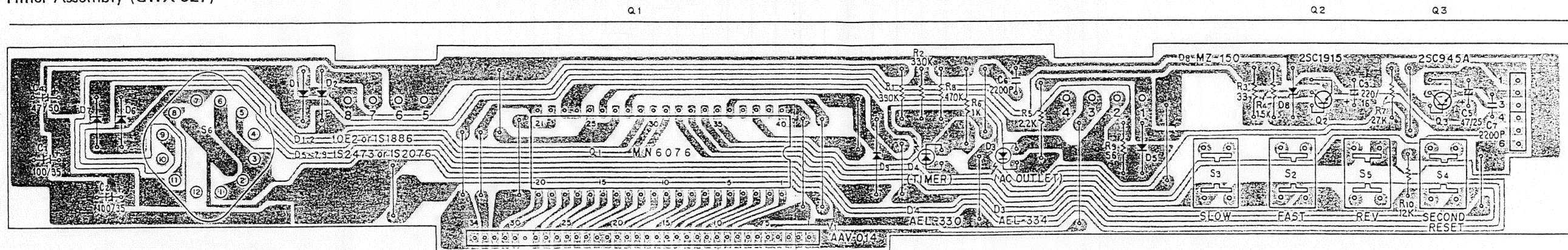
SWITCHES:  
S1-1 : AC OUTLET (OFF) ON - OFF  
S1-2 : AC OUTLET (ON) ON - OFF  
S1-3 : AC OUTLET (TIMER) ON - OFF  
S2 : TIME ADJUST (FAST) ON - OFF  
S3 : TIME ADJUST (SLOW) ON - OFF  
S4 : TIME ADJUST (SEC RESET) ON - OFF  
S5 : TIME ADJUST (REV) ON - OFF  
S6 : MODE  
SLEEP - TIMER SET OFF - TIMER SET ON -  
CLOCK - SECOND - CLOCK ADJUST

The underlined indicates the switch position.

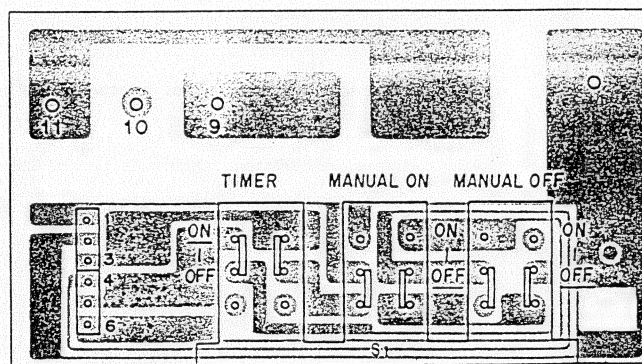
This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

## 5. P.C.BOARD PATTERNS

Timer Assembly (GWX-527)



Switch Assembly (GWS-257)





ADDITIONAL

 PIONEER®

# Service Manual

ORDER NO.  
ART-745-0

AUDIO DIGITAL TIMER

# DT-510

NE, YB

MODEL DT-510 COMES IN SIX VERSIONS DISTINGUISHED AS FOLLOWS:

Type	Voltage	Remarks
KU	120V only	U.S.A model
KC	120V only	Canada model
S	110V, 120V, 220V and 240V (Switchable)	General export model
S/G	110V, 120V, 220V and 240V (Switchable)	U.S. Military model
YB	240V only	United Kingdom model
NE	220V only	Europe model

- This additional service manual is applicable to the DT 510/YB, NE.
- The basic performance of the DT-510/YB, NE types are the same as the DT-510/S type. Please refer to the DT-510/S type service manual (ART-744) with exception of this supplements.

## 1. SPECIFICATIONS

Time display ..... Digital display with fluorescent display tube

Timer type ..... 24-hour type (24-hour display)

Timer setting ..... Only one ON/OFF time setting in minimum units of minutes within a 24-hour period

Sleep timer ..... Setting in minimum units of minutes up to 1 hour 59 minutes

Time accuracy ..... Synchronized with line frequency

Timer accuracy ..... Within  $\pm 0.1$  sec. of time displayed

Sleep timer accuracy ..... Within 59 sec. of set time

### Power section, others

Power requirements ..... NE model; AC 220 V, 50 Hz  
YB model; AC 240 V, 50 Hz

AC outlet capacity power ..... 500 W max. (inductive load)

Power consumption ..... 6 W

### Other functions

- AC OUTLET "on" display (red LED lights)
- Timer operation display (green LED lights)
- Power failure display (time display winks)

Dimensions ..... 420 (W) x 50 (H) x 144 (D) mm  
16-9/16 (W) x 2 (H) x 5-11/16 (D) in

Weight ..... 1.7 kg (3 lb 12 oz)

### Accessories

Operating Instructions (English/German/French/Italian) ..... 1

#### NOTE:


*Specifications and design are subject to possible modification without notice due to improvements.*








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## 2. CONTRAST OF MISCELLANEOUS PARTS

**NOTES:**

- Parts without part number cannot be supplied.
- The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your Parts Stock Control, the fast moving items are indicated with the marks **★★** and **★**.  
**★★ GENERALLY MOVES FASTER THAN ★**  
This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.

Mark	Symbol & Description	Part No.			Remarks
		S type	YB type	NE type	
	Timer assembly	GWX-526	GWX-525	GWX-525	
	Switch assembly	GWS-256	GWS-255	GWS-255	
	AC socket (AC OUTLETS)	AKP-040	AKP-044	AKP-026	
 ★★	S9 Line voltage selector	AKX-063	.....	.....	
 ★★	S7 Power switch	.....	ASH-501	ASH-501	
 ★	T1 Power transformer	ATT-724	ATT-726	ATT-713	
 ★★	RL1 Relay	ASR-502	ASR-501	ASR-501	
	AC power cord	ADG-046	ADG-051	ADG-041	
 ★★	FU1 Fuse (T 2.5A)	.....	.....	AEK-403	
	Operating instructions	ARB-409	ARD-162	ARD-162	
	Front panel assembly	ANM-020	ANM-031	ANM-031	
	Packing case	AHD-909	AHD-912	AHD-912	



## 3. PARTS LIST

### 3.1 TIMER ASSEMBLY (GWX-525)

Mark	Part No.	Symbol & Description	
★ ★	ASG-163	S2—S5	Tact switch
★ ★	ASD-080	S6	Rotary switch

#### CAPACITORS

Mark	Part No.	Symbol & Description	
	CEA 101M 35L	C1,C2	
	CEA 221M 16L	C3	
	CEA 470M 50L	C4	
	CEA 470M 25L	C5	
	CKDYB 222K 50	C6,C7	

#### RESISTORS

*NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.*

Mark	Part No.	Symbol & Description	
	RD¼PM □□□J	R1—R10	

#### SEMICONDUCTORS

Mark	Part No.	Symbol & Description	
★ ★	MN6076	Q1	
★ ★	2SC1915	Q2	
★ ★	2SC945A	Q3	
★	10E2 (1S1886)	D1,D2	
★	AEL-334	D3	
★	AEL-330	D4	
★	1S2473 (1S2076)	D5—D7,D9	
★	MZ-150 (WZ-150)	D8	

#### OTHER

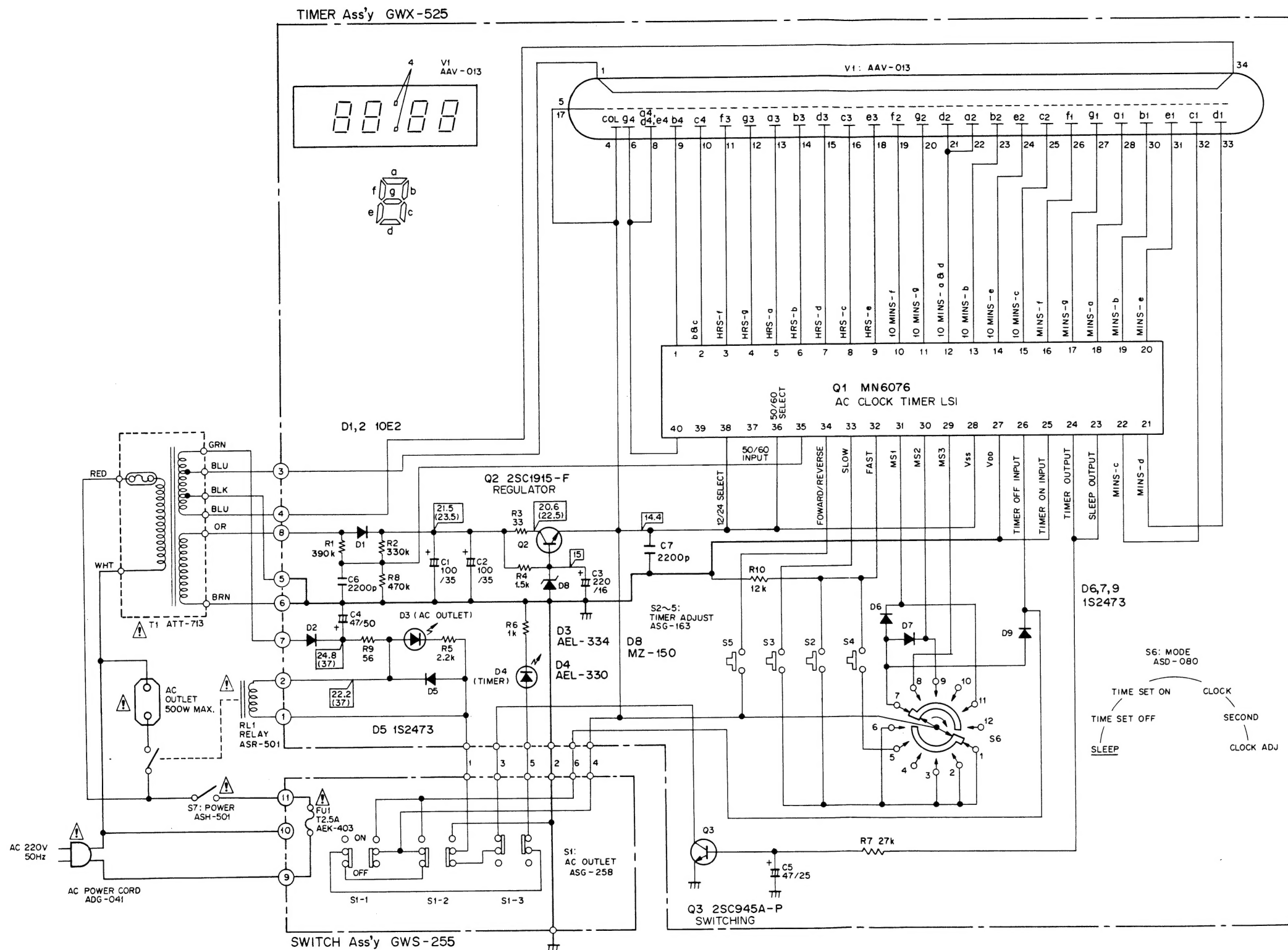
Mark	Part No.	Symbol & Description	
★	AAV-013	V1	Fluorescent indicator tube

### 3.2 SWITCH ASSEMBLY (GWS-255)

Mark	Part No.	Symbol & Description	
★ ★	ASG-258	S1	Push switch

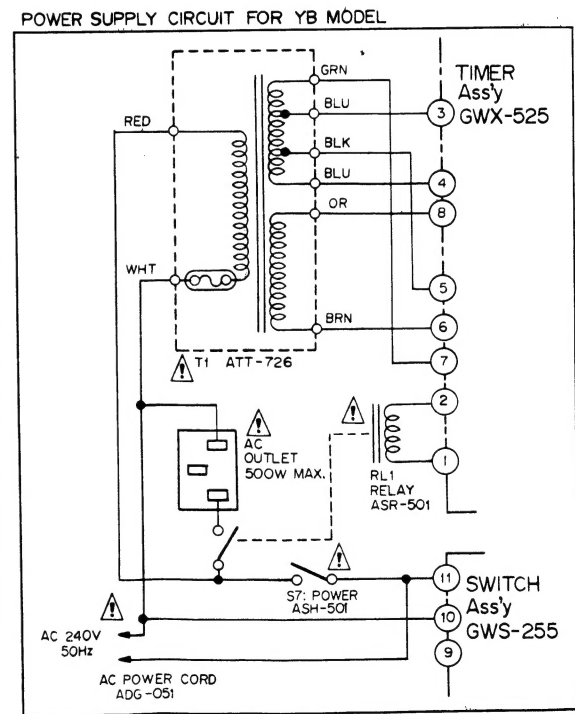
# 4. SCHEMATIC DIAGRAM

NOTE:  
The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.



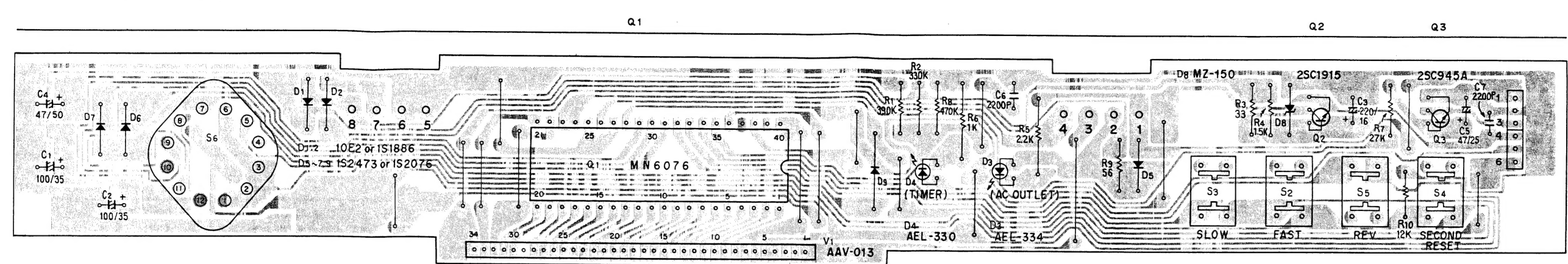
1. RESISTORS:  
Indicated in  $\Omega$ ,  $\frac{1}{4}W$ ,  $\pm 5\%$  tolerance unless otherwise noted k : k $\Omega$ , M : M $\Omega$ , (F) :  $\pm 1\%$ , (G) :  $\pm 2\%$ , (K) :  $\pm 10\%$  tolerance
  2. CAPACITORS:  
Indicated in capacity ( $\mu F$ )/voltage (V) unless otherwise noted p : pF  
Indication without voltage is 50V except electrolytic capacitor.
  3. VOLTAGE  
□ : DC voltage (V) at TIMER, RELAY ON.  
Value in ( ) is DC voltage at AC OUTLET OFF.
  4. OTHERS:  
The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- SWITCHES:
- S1-1 : AC OUTLET (OFF) ON - OFF
  - S1-2 : AC OUTLET (ON) ON - OFF
  - S1-3 : AC OUTLET (TIMER) ON - OFF
  - S2 : TIME ADJUST (FAST) ON - OFF
  - S3 : TIME ADJUST (SLOW) ON - OFF
  - S4 : TIME ADJUST (SEC RESET) ON - OFF
  - S5 : TIME ADJUST (REV) ON - OFF
  - S6 : MODE  
SLEEP - TIMER SET OFF - TIMER SET ON -  
CLOCK - SECOND - CLOCK ADJUST
  - S7 : POWER ON - OFF
- The underlined indicates the switch position.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.



5. P.C.BOARD PATTERNS

Timer Assembly (GWX-525)



Switch Assembly (GWS-255)

